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Applicant claims as his invention a container with the specified *structure*. The claimed structures have certain unexpected and beneficial properties, primarily the ability to impede the migration of contaminants contained in the PCR into the container's interior. Applicant thus considers the structure to constitute his invention, and not what the container may likely contain. The statute (35 U.S.C. § 112, second paragraph) requires and permits Applicant to claim his novel and unobvious structure. Applicant's doing so does not contravene the statutory requirements.

In paragraphs 8 and 9 of the Office action, the examiner questioned the meaning of the terms "continuous" and "substantially [continuous]" respectively. However, as also discussed during the telephone interview, the examiner's attention was drawn to the specification at page 6, line 24, to page 7, line 22, for a discussion of these phrases. "Continuous" means no discontinuities, but "substantially continuous" permits "[m]inor gaps . . . so long as the contaminant concentration reaching the container's interior remained below the level of acceptability . . . ." In light of this discussion, no confusion can result from the use of these terms. As a consequence, no violation of the statute has occurred.

With regards to Claim 59, Applicant's attorney had, prior to the last AMENDMENT, indicated that he would insert the words "post-consumer recycled polyethylene" into the claim. His neglect to do so previously is truly regretted. The present amendment to that claims corrects that oversight.

Claims 1 to 3 were rejected under 35 U.S.C. § 103(a) as obvious over Bright in view of Yano et al.. Claims 4 to 15 and 18 to 20 were rejected under 35 U.S.C. § 103(a) as obvious over Bright in view of Yano et al. and Moore et al. Claims 16 and 17 were rejected under 35 U.S.C. § 103(a) as obvious over Bright in view of Yano et al., Moore et al., and Strum et al. Claims 23, 24, and 26 were rejected under 35 U.S.C. § 103(a) as obvious over Bright in view of Cushing et al. Claims 25, 27 to 33, 35 to 39, and 40 to 43 were rejected under 35 U.S.C. § 103(a) as obvious over Bright in view of Cushing et al. and Moore et al. Claim 34 was rejected under 35 U.S.C. § 103(a) as obvious over Bright in view of Cushing et al., Moore et al., and Strum et al. Claims 44 to 56 and 58 were rejected under 35 U.S.C. § 103(a) as obvious over Mehta et al. in view of Bright and Moore et al. Claim 57

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was rejected under 35 U.S.C. § 103(a) as obvious over Mehta et al. in view of Bright, Moore et al., and Strum et al. Applicant respectfully traverses these rejections.

Initially, the patentability of Claim 1 has received a discussion above in connection with its rejection on formal grounds. As stated there, no one has created a structure having a polyethylene layer in a container with polypropylene in intimate contact with it and lying toward the container's interior. This structure has various benefits as discussed in the application. Yet, no one has taught or suggested this structure, and certainly no one has realized the resulting benefits. Accordingly, Claim 1 appears patentable over the cited references.

Applicant's invention as set forth in the claims as presently amended involves the use of post-consumer recycled ("PCR") resins as part of the *structure* of containers that may well hold substances consumed by people. The critical problem requiring solution concerns preventing the consuming (eating or drinking) by human beings of unacceptable amounts of undesirable substances emanating from the PCR resins. The PCR may obtain the objectionable (to say the least) substances during its first use by consumers. As stated in the specification, the contaminants may take several unknown forms including, for example, toxic insecticides. To permit the use of the PCR resins in second-generation containers requires keeping sufficiently low the level of harmful impurities previously obtained when the resins found prior use as part of containers with now unknown contents.

Additionally, the manufacture of the containers with the PCR's should not involve excessive additional costs. Hopefully, the use of the previously discarded PCR resins should result in a reduction of the container's final costs. At the very minimum, it will reduce the amount of such previously used resin that will otherwise require some form of disposal. In fact, the optimal situation would permit the use of the current equipment in the usual fashion to make the containers that incorporate the PCR plastic.

As discussed in the interview mentioned above, the claims, as presently amended, set forth Applicant's invention and serve to patentably distinguish them from the cited references listed above. For the reasons given below, Applicant believes that the subject application is allowable over the cited prior art.

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With regards to the remaining claims (aside from Claim 1) and as discussed during the telephone interview mentioned above, Applicant has provided a structure having a plurality of layers in intimate contact with each other. One of the layers has post-consumer recycled resins ("PCR") in polyethylene ("PE"). One of the layers lying toward the interior of the container from the PE with the PCR contains a material that serves to impede the migration of contaminants from the PE-PCR layer into the container's contents. In fact, Claims 2 to 59 now explicitly state that the additional layer has this function. None of the references suggests this result or, in fact, any of Applicant's specifically claimed structures.

Thus, in particular, Cushing et al. simply relates to the well known use of ethylene vinyl alcohol ("EVOH") as a barrier layer. However, oxygen gas is the ingredient that EVOH has provided a barrier against. Oxygen, of course, when introduced into a food product, for example, can cause serious degradation in the food's taste and smell. However, it does not represent a contaminant from PCR. Cushing et al. simply do not teach or suggest the use of EVOH in conjunction with a layer of PCR. Further, Cushing et al. do not recognize that EVOH can prevent the migration of contaminants from PCR's into the contents of a container. For these reasons, Cushing et al. does not anticipate or render obvious any of Applicant's claims.

Mehta provides a container with an outer layer of polyethylene-polypropylene copolymer and an inner layer of polyethylene. The surface of the inner layer has received a coating of fluorine. However, the structure has only "improved thermal resistance and improved flavor and aroma barrier properties". (Col. 2, lines 30 to 32.) The reference provides no teaching or suggestion as to preventing the migration of contaminants from a PCR and, in fact, makes no use of a PCR. For these reasons, Mehta does not derogate from the patentability of Applicant's invention.

Similarly, the newly cited references of Bright and Yano et al. add nothing new and also do not preclude the allowability of Applicant's application. Bright has a multi-layer parison used to make containers. The selection of at least one of the layers has the purpose of providing a gas barrier. (Col. 4, lines 35 to 48.) Again, it has no mention of impeding the migration of contaminants from a PCR or the use of PCR's at all. Yano et al.

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reveal the classic structure of A/B/C/B/A where A constitutes the usual plastic of a container, C represents a gas and possibly solvent barrier. The reference makes no mention of impeding the migration of contaminants from a PCR. In fact, by having the same outer and inner layers ("A" in both instances), the disclosure actually teaches away from the use of a PCR. For all of these reasons, the new citations of Bright and Yano et al., whether taken alone, together, or in combination with other references, fail to detract from the patentability of Applicant's invention.

In paragraph 18, page 11, in the first full paragraph, the examiner states that "process limitations do not impart patentability to the article claimed". While Applicant agrees with the general wisdom of this statement, the present situation does not fall within the stated circumstances. Rather, these limitations, while appearing in the form of process limitations, actually constitute well-known structural features. In other words, one skilled in the art can well determine whether a container under examination resulted from injection molding, thermoforming, or other process. This ability to make this determination stems from the distinct structural appearance of the container so produced. Thus, although the words appear to constitute process limitations, they actually describe, with definitiveness and clarity, structural features. Thus, they may, as descriptions of structural features, impart patentability. In the present case, no one has previously suggested that containers distinctive of these processes but incorporating PCR's may still safely hold substances intended for human consumption. For these reasons as well, the claims appear to possess patentability over the cited references.

Applicant believes that the above should place his application in condition for allowance. However, if some minor impediment prevents this action, the examiner is then respectfully requested to telephone Applicant's attorney at the number given below. This would portend the saving of substantial effort and cost on the part of both the Patent and Trademark Office and Applicant. Applicant also expresses his appreciation to the examiner for her indication of allowable subject matter in the examined claims.

The present paper timely responds to the December 18, 1998, Office action. Accordingly, no extension fee would appear to be required. However, should this prove

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incorrect, then any required extension fee may be charged to Deposit Account 06-2135 of the undersigned attorney.

Respectfully submitted,



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#### CERTIFICATE OF FAXING

I certify that this correspondence is being forwarded to the Assistant Commissioner for Patents at Washington, D.C. 20231, by facsimile to the number (703) 305-5436 on January 7, 1999.



Eugene F. Friedman

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